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PREVENTION OPPORTUNITIES UNDER THE BIG SKY

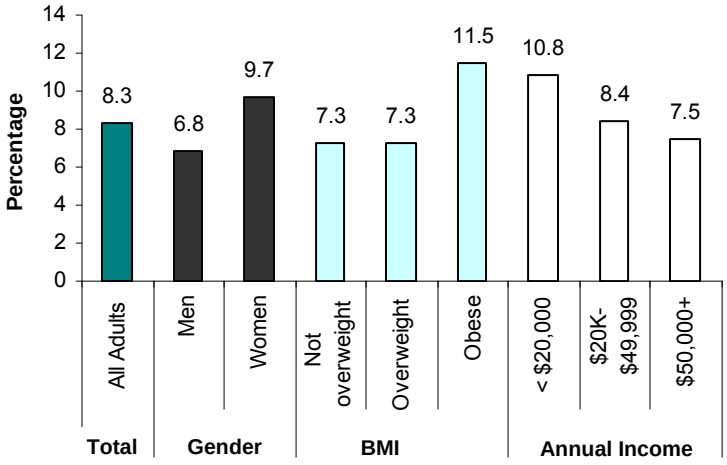
ASTHMA IN THE LIVES OF MONTANA'S ADULTS

Asthma is a chronic inflammatory disease of the airways characterized by episodic symptoms of wheezing, shortness of breath, coughing and chest tightness. Though asthma is often considered a pediatric illness, the disease affects over 19 million adults in the United States. In 2004, asthma was responsible for nearly 500,000 hospitalizations, 2 million emergency room visits and 5000 deaths nationwide and the economic burden of the disease totaled more than $16 billion dollars.[1] Asthma exacts a significant chronic disease burden on the adult population in Montana. In all, an estimated 60,000 adults in Montana currently have asthma, and the disease is responsible for over 400 hospitalizations and 10 to 20 deaths among Montana adults each year. To further explore the asthma disease burden among adults in Montana, this report uses data from the 2006 Behavioral Risk Factor Surveillance System (BRFSS), to describe populations at risk for the disease as well as recommendations for intervention and treatment. In addition, the recently established Montana Asthma Control Program is introduced.

Populations at Risk

The Montana BRFSS results indicate that 8.3% (95%CI 7.4-9.3%) of adults aged 18 or older currently have asthma; 12.4% (95%CI 11.3-13.5%) reported ever being told that they had asthma. Disparities in asthma prevalence exist for gender, income, and Body Mass Index groups. Paralleling national trends, women in Montana have a greater prevalence of current asthma compared to men. In addition, persons of lower income and who are obese shoulder a higher asthma burden in the state. (Figure 1)

Figure 1. Asthma prevalence in Montana adults, 2006



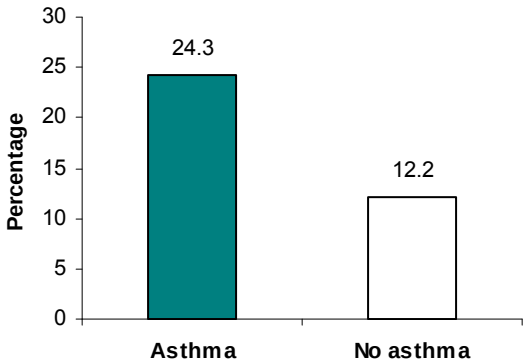
There were no significant differences in the prevalence of asthma by age, health insurance status or between American Indians and whites.

Opportunities for intervention

Although tobacco smoke is a known asthma trigger, one in five adults in Montana with asthma report smoking (21.7%; 95%CI 16.3-28.3%). Also of concern, less than half of respondents with asthma indicate they have received an influenza vaccination in the past year, despite the Centers for Disease Control and Prevention's recommendations that all persons with asthma receive a yearly vaccine (45.2%, 95%CI 39.4-51.1%). Overall, asthma seems to significantly effect individuals' perception of their overall health. Adults with asthma in Montana are twice as likely to report that their general health status is fair or poor compared to respondents without asthma. (Figure 2)

Fast fact:
20% of adults with asthma in Montana are smokers and 64% are obese or overweight.

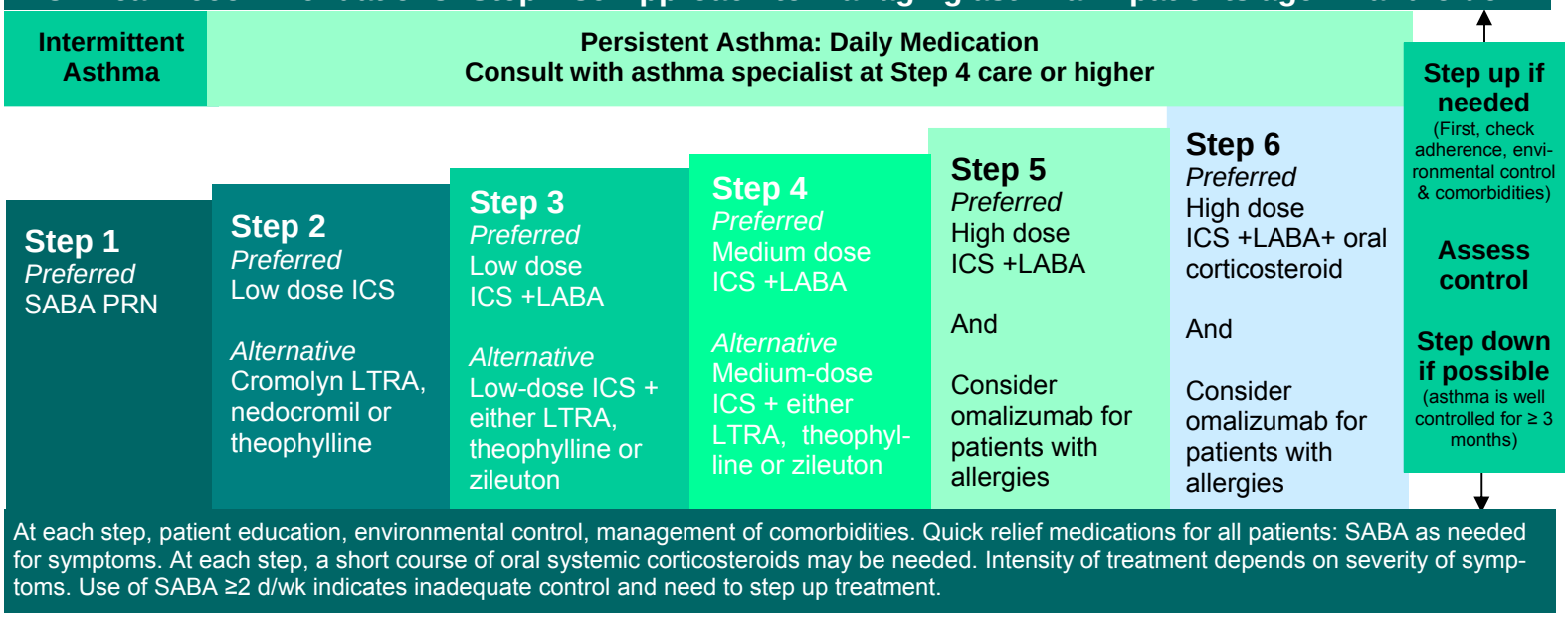
Figure 2. Self reported fair or poor health among adults with and without asthma, 2006



Comment: Asthma poses a significant health burden to adults in Montana, particularly at-risk populations such as women, persons of low income and overweight/ obese individuals. Numerous opportunities for intervention exist for adults who have asthma, including increased self management education, smoking cessation efforts and weight loss initiatives. New guidelines from the National Heart, Lung and Blood Institute (NHLBI) recommend a stepwise approach to managing asthma in the clinical setting (see recommendations below).[2]

New Asthma Control Program: To help address the burden of asthma in Montana, the state legislature has provided funds to DPHHS to establish a new asthma control program. Initially, the program will develop a surveillance system to monitor emergency department use for asthma and establish an advisory group to assist DPHHS in developing and implementing effective asthma control strategies. Program staff are currently compiling existing asthma data into an asthma burden report for the state that will be available in Spring 2008.

Clinical Recommendations: Stepwise Approach to managing asthma in patients age 12 and older



SABA/LABA Short/Long acting β agonists, PRN as needed, ICS inhaled corticosteroids, LTRA leukotriene receptor agonists. Adopted from NHLBI guidelines, 2007.

For more information about the Asthma Control Program contact Katie Loveland at 406-444-7304 or kloveland@mt.gov

References:
1. Centers for Disease Control and Prevention. National Center for Health Statistics. Asthma Prevalence, Health Care and Mortality 2004. http://www.cdc.gov/nchs/products/pubs/pubd/hestats/ashtma03-05/asthma03-05.htm (accessed on September 4, 2007)
2. National Heart, Lung, and Blood Institute Guidelines for the Diagnosis and Management of Asthma (EPR-3), 2007. http://www.nhlbi.nih.gov/guidelines/asthma/index.htm (accessed on September 4, 2007)

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